a coolant flow inlet;

a coolant flow outlet sized to receive the lower tie plate of a fuel bundle; and a coolant flow bore extending between said coolant flow inlet and said coolant flow outlet, said coolant flow inlet offset from said coolant flow outlet so that a centerline of said coolant flow inlet is parallel to a centerline of said coolant flow outlet.

9. (amended) A core for a nuclear reactor comprising:

a plurality of fuel bundles, each fuel bundle comprising a lower tie plate;

a plarality of cruciform shaped large control rods;

a plurality of cruciform shaped control rod guide tubes; and

a core plate assembly comprising:

a flat plate,

a plurality of support beams, said flat plate positioned on top of said support beams;

a plurality of control rod guide tube openings, each said guide tube opening sized to receive a control rod guide tube, said control rod guide tube openings arranged in staggered rows; and

a plurality of fuel supports extending through said flat plate, each said fuel support comprising:

a coolant flow inlet;

a coolant flow outlet sized to receive the lower tie plate of a fuel bundle; and

a coolant flow bore extending between said coolant flow inlet and said coolant flow outlet, said coolant flow inlet offset from said coolant flow outlet so that a centerline of said coolant flow inlet is parallel to a centerline of said coolant flow outlet.